SARRACENIA MINOR VAR. *OKEFENOKEENSIS* (SARRACENIACEAE) DISCOVERED OUTSIDE OF THE OKEFENOKEE SWAMP AREA

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ABSTRACT

A population of *Sarracenia minor* var. *okefenokeensis* is reported from Kings Bay, a 1390 ha basin swamp 30 km northeast of the Okefenokee Swamp in southeast Georgia. This is the first documented account of the variety in a landform other than the Okefenokee Swamp.

RESUMEN

Se cita una población de *Sarracenia minor* var. *okefenokeensis* de Kings Bay, una cuenca pantanosa de 1390 ha situada 30 km al noreste de Okefenokee Swamp en el sureste de Georgia. Esta es la primera población documentada de la variedad fuera de Okefenokee Swamp.

Sarracenia minor Walt. var. *okefenokeensis* Schnell (Okefenokee Giant) was first recognized as a new variety of *Sarracenia minor* in 2002 and is currently defined as endemic to the Okefenokee Swamp area in southeast Georgia (Schnell 2002; Weakley 2010). The Okefenokee variety differs from *S. minor* var. *minor* in morphology, habitat requirements, and flowering time (Schnell 2002; NatureServe 2010). Individuals of *S. minor* var. *okefenokeensis* are generally much taller than *S. minor* var. *minor*, averaging 70–90 cm in height (vs. 25–35 cm in var. *minor*) and have a more slender appearance. Furthermore, *S. minor* var. *okefenokeensis* flower about two weeks later at the same latitude and prefer a much wetter habitat. These differences are maintained in a common garden (Schnell 2002).

Sarracenia minor var. *okefenokeensis* has been designated by NatureServe as G4T2T3 (Globally Imperiled) and has a state rarity rank of S2S3 (Imperiled) in Georgia (NatureServe 2010). Previous work has suggested that populations may be found from 5 km (Schnell 2002) to 8 km (NatureServe 2010) outside the borders of the Okefenokee National Wildlife Refuge (NWR). Unlike the protected populations that exist within the borders of Okefenokee NWR, populations in surrounding areas may suffer from a variety of different anthropogenic threats (NatureServe 2010). Also, there is a lack of population locality information.

The novel occurrence reported here was found 30 km northeast of the Okefenokee Swamp border across the Satilla River (Fig. 1), though in a basin swamp environment similar to those within the Okefenokee. A population of *S. minor* var. *okefenokeensis* was found in Kings Bay, a 1390 ha peat-filled nonriverine basin swamp that stretches 13 km from southeast Brantley County to northwest Camden County (not to be confused with Kings Bay Naval Base in Camden County). Kings Bay exists on a Pleistocene barrier island and was probably a large marshy tidal lagoon in ancient times. Currently, Kings Bay and the Okefenokee Swamp are not connected and it is uncertain whether they were joined in previous times. Thousands of *S. minor* var. *okefenokeensis* individuals were found on floating Peatmoss (*Sphagnum* spp.) mats with *Woodwardia virginica*, *Peltandra sagittifolia*, *Nymphaea odorata* ssp. *odorata*, *Lachnanthes caroliniana*, *Xyris fimbriata*, *Rhynchospora distans*, and *Utricularia subulata*. The Peatmoss mats were floating over approximately 0.5–1 m of water. Plants were also found on scattered hummocks with shrubs of *Lyonia lucida* covered with *Smilax laurifolia*. Small trees of *Pinus elliottii* var. *elliottii*, *Taxodium ascendens*, and *Gordonia lasianthus* were widely spaced throughout the community.

Voucher specimen: **GEORGIA. Brantley Co.:** Kings Bay, S of Kings Bay Rd., 4 km NW of the Kings Bay Rd and Hwy 110 intersection, 81°50'20.431"W 31°8'24.884"N, 10 Jun 2010, *Thompson 1* (VSC)

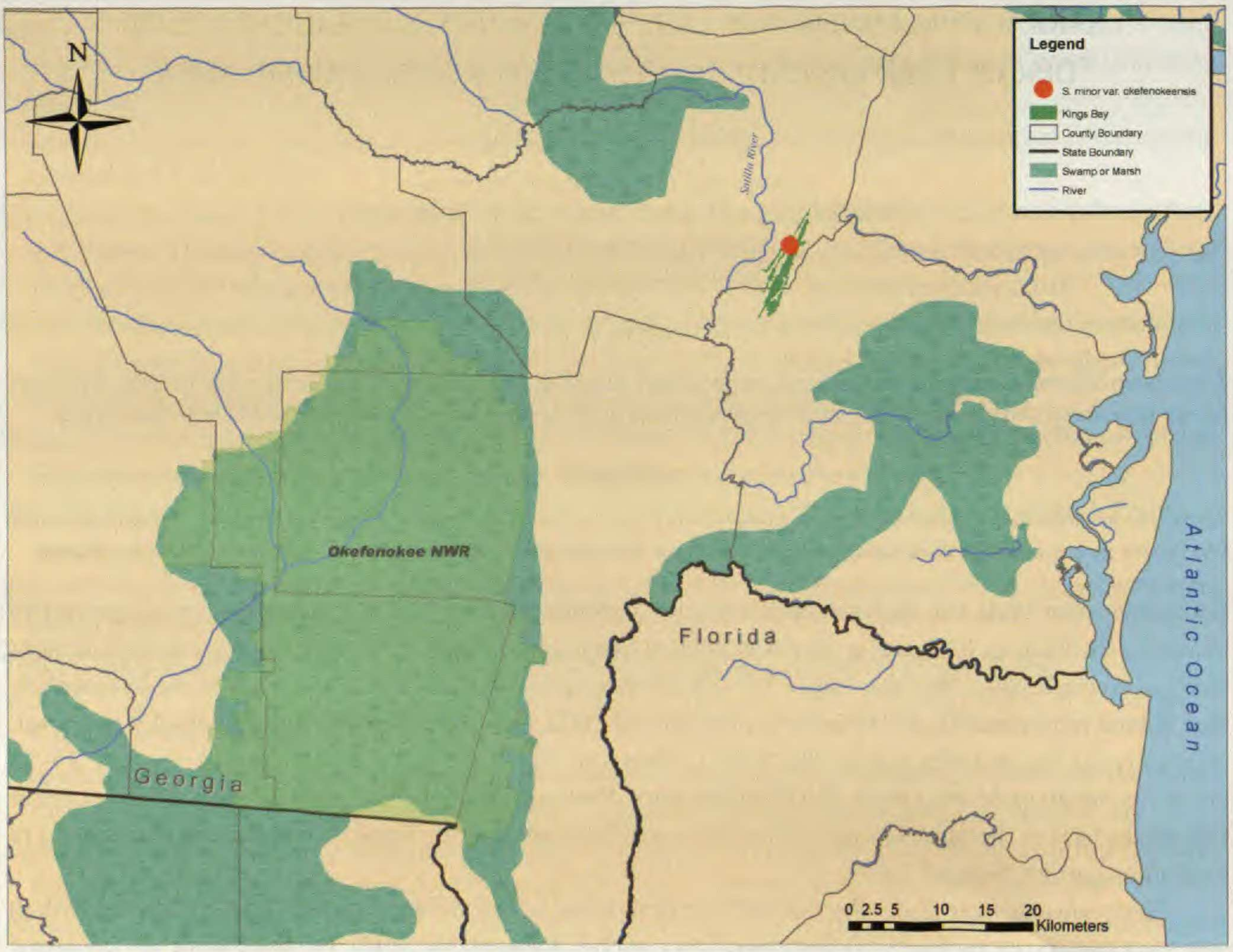

Fig. 1. Location of a *Sarracenia minor* var. *okefenokeensis* population in Kings Bay in southeast Georgia.

It should be noted that some authors do not give *S. minor* var. *okefenokeensis* taxonomic recognition. Some consider the unusual, robust morphology of plants within the Okefenokee Swamp to be ecologically induced variation that can be found across the range of *S. minor*, which stretches from North Carolina to Florida (Bell 1949; McDaniel 1966; McDaniel 1972; Mellichamp & Case 2009). However, Schnell's (2002) work disputes this. Perhaps more studies comparing the characteristics of plants in the Okefenokee Swamp and Kings Bay to those across the range of *S. minor* are necessary.

Despite the taxonomic controversy associated with *S. minor* var. *okefenokeensis*, this large population warrants future study. To those who recognize *S. minor* var. *okefenokeensis*, a study of genetic and morphological comparisons to populations within the Okefenokee Swamp may be important. Future surveys of Kings Bay are necessary to examine the limits and actual size of the *S. minor* var. *okefenokeensis* population. These surveys could also reveal new occurrences of other pitcherplant species (such as *S. psittacina*) found within the nearby Okefenokee Swamp. Furthermore, presently there is no protection for this population, as it exists on privately owned lands. This noteworthy population and its unique habitat should be considered a conservation priority in Georgia and efforts to protect Kings Bay are recommended.

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